[AN COMPREHENSIVE GAS PROCESSOR]

Abstract of Disclosure

The present invention related to an apparatus for efficient and cost-effective comprehensive processing of natural gas, including the removal of moisture and the recovery of the higher hydrocarbons components (C_2^+). The said apparatus comprises the following major components: an integrated natural gas processor with a dehydration section and a higher hydrocarbons absorption section; a heat transport medium cooler; an absorbent cooler; a fractional distiller for separating the light oil from the heavy oil absorbent; an inhibitor regenerator; and a refrigeration unit. The present invention provides a low-cost natural gas comprehensive processor that is universally applicable to both terrestrial and off-shore natural gas exploitation. The said apparatus also provides an efficient and cost-effective natural gas dehydrator when the dehydration section is used independently without incorporating the absorption section..

Figures